



DoD UID Policy Office Small Arms Update

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June 2009

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Office of the Secretary of Defense
Defense Procurement and Acquisition Policy
OUSD(AT&L)/DPAP/PDI

IUID Small Arms Ad-Hoc Group



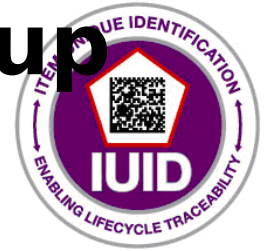
Purpose: The DoD UID Policy Office wanted to establish open communication regarding the identification and potential issues regarding small arms marking. There is evidence that the marking processes being utilized for small arms identification and marking are either not capable of successful IUID marking (for the life of the item) or not under control. The evidence ranges from observation of newly delivered items with damaged or peeling labels to marking damaged through operational use.

When: The initial kick off meeting was conducted during the UID Forum (April 6-8 2009 in Denver, CO). Subsequent meetings/teleconferences have been conducted to continue dialogue.

Who: DoD UID Policy Office, Service Representatives, PM Solider Weapons, PM-JAIT, Industry Leaders and IUID Subject Matter Experts.

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The Re-Testing Process



Re-Testing: To determine if, and what, the issues may be regarding small arms marking, the participating members have discussed the option for re-testing small arms marking (lab vs actual use vs technology advances). The re-testing location is currently under review as well as the re-testing process. Some of the re-testing points include:

1. Is the method capable (is reasonable permanence and durability possible)?
2. Is the application of the mark error proofed (environment, cleanliness, training/documentation and fresh starting stock: new labels or)?
3. Have the Environmental issues been adequately defined and assessed?
4. What affect does operational use have on the marking permanency and has operational testing been performed?
5. What factors play a primary roll in the marking permanency?
 - a. Roughness
 - b. Contamination
 - c. Surface Preparation
 - d. Marking material
 - e. Adhesive
6. Does the mark's location affect its permanency and should it be standardized to the extent practical?

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Other On-going Activities



Fort Carson: In addition to designing/implementing a re-test, other options have to collect small arms marking data have been discussed. This includes utilizing the Fort Carson small arms use case demonstration.

- Small arms marked in March 2008
- ID Integration (Vendor) verified marks in August 2008
- Fort Carson deployed to OIF and will return CONUS in September 2009.
 - At that time, PM-JAIT will conduct re-verification of small arms marking.

USMC: Currently testing Automated Armory Pilot – initial results are very favorable.

In addition, USMC 3rd MEF will receive marked small arms (July 2009) along with combat essential equipment. Data received from the deployment of these small arms will be shared with the appropriate community. USMC will continue to submit PQDRs indicating defective small arms marks to appropriate chain of command.

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Future Actions and Next Steps



Next Teleconference scheduled for 30 June 2009 at 1500 EST

- Please contact robert.leibrandt@osd.mil for teleconference dial information

Finalizing re-testing locations:

- Army Research Lab (ARL) in Adelphi, Maryland
- Fort Eustis, Virginia

Finalizing re-testing design

Discussing a survey or marking methods (current vendors and technology)



IUID Quality Issues

- Marking
 - Symbolology
 - Verification
 - Syntax
 - Validation
- Data Quality
 - Poor data from suspect legacy systems
 - Manual entry
- Data Submission
 - Initial WAWF data submit (minimum data and/or optional)
 - Embedded (i.e., children) submit
 - Update for “trigger events”
- How do you report problems?

The Quality of the Mar



- Symbology Verification
 - The Mil-Std 130 reference quality standards provide guidance to confirm the quality of the mark
 - ISO 15415
 - AS9132
 - AIM DPM
- Syntax Validation
 - ISO 15434 provides requirements

Reporting Errors at Receipt/Acceptance



- Registry Duplicate or Insufficient Data to IUJD Registry (Do not Accept Item)
- Item or Package Marking Errors
 - Product Quality Deficiency Report (PQDR)
 - Supply Deficiency Report (SDR)



Common Errors

Sample IUID Problems



- **Wrong MIL-STD used (130k versus l, m or n)**
- **Placement incorrect**
- **Tag application unsatisfactory**
- **Data Matrix encoded incorrectly**
- **Refusal to rectify by vendor**